

Delta Stewardship Council

B.2. Application Form for Consideration of a Plan or Project

1. Applicant Information

Request: Consideration as an early action to close the Delta Cross Channel (DCC) gates for a two week period in October 2010 to alter flows for the benefit of Mokelumne River Chinook Salmon.

Applicant: Water4Fish a pending 501C3 non profit corporation

5700A Imhoff Drive

Concord, CA 94520

Contact name of responsible individual:

Richard Pool, President

5700A Imhoff Drive

Concord CA, 94520

rbpool@protroll.com

(925) 825-8560

Plan or project narrative:

Applicant requests the closure of the Delta Cross Channel gates located at Walnut Grove California for the period of October 4, 2010 through October 16, 2010 and each succeeding like period in 2011 and beyond. The purpose of the closure is to alter Delta flows as an ecosystem recovery step to improve the migration of adult Mokelumne River Chinook salmon to their spawning grounds in the Mokelumne River and to the Mokelumne River salmon hatchery.

The Mokelumne River Fish Hatchery (MRFH) is the most modern salmon hatchery in the state. When it runs at full production it is unmatched in its efficient production of smolts and its contribution to the state's salmon fishery. The

Mokelumne River itself contains prime habitat water flow, temperature and gravel conditions for the successful natural spawning of wild Chinook salmon.

In the last few years, the Delta water operations in the fall of the year have virtually shut the hatchery down and curtailed much of the natural spawning. The problem occurs as the adult salmon are attempting to return to the Mokelumne River and the hatchery in the fall. The Mokelumne River has a relatively small watershed. During the upmigration period for the fall run, flows in the main stem Mokelumne where it enters the Delta can be as low as 100 cfs in normal and below normal runoff years due to water contracts and agricultural water demands and preservation of the coldwater pool. At the same time the flow through the nearby cross channel gates can reach up to 3,000 cfs, all of which flows through the Mokelumne (North and South Forks) as the conveyance channel to the South Delta and the pumping facilities. The large component of Sacramento River water in the Mokelumne River at this location is an important contributor to straying of Mokelumne origin fall run salmon. If the salmon sense the smell, they will turn into the main stem Mokelumne. If they miss the smell they will go into the heavy flow and go through the cross channel gates. These fish are then strays in the Sacramento River system. A map of the showing the Mokelumne and Cross Channel gates interface is attached.

In 2008 only 49 females found their way back to the Mokelumne hatchery virtually shutting it down. The hatchery needs 2,000 females to meet its full production and its mitigation requirements. In 2009 the problem continued and more Mokelumne fish ended up at the Nimbus hatchery than Nimbus fish. By closing the Cross Channel gates as an adaptive management measure during the peak adult salmon migration period, the biologists at the fishery agencies and at the East Bay Municipal Utility District believe straying to the American River would be reduced and Mokelumne escapement would increase. East Bay MUD owns the hatchery and it is operated by the California Department of Fish and Game.

To compliment the Cross Channel gates closure, East Bay Mud at their own expense has reserved a pool of cold water which will be used in this same period for two significant cold water pulse flows down the Mokelumne to attract the salmon. Pulse flows are a common salmon attraction practice in many watersheds.

2. Project Review by Public Agencies

The plan is supported by the California Department of Fish and Game, The U.S. Fish and Wildlife Service and the National Marine Fisheries Service. The USFWS and DFG approval form is attached.

The U.S. Bureau of Reclamation is processing a request for the project but has not yet provided its approval.

3. Environmental Impact Documentation

None required.

4. Assessment against Delta Reform Act Policy Objectives

(a) Manage the Delta's water and environmental resources and the water resources of the state over the long term.

The project may have a short term impact on the water available for export pumping depending on how the water supply and pumping operations are managed before and after the project. It may be possible to alter flows before and after the project such that no permanent water impact will occur. The Bureau of reclamation is evaluating this.

(b) Protect and enhance the cultural, recreational, and agricultural values of the California Delta as an evolving place.

Not applicable.

(c) Restore the Delta ecosystem, including its fisheries and wildlife, as the heart of a healthy estuary and wetland ecosystem.

The project contributes to the Delta Stewardship Council approved Interim Plan goal #4(c) stated above.

The project also complies with the intent of the Delta Reform Act SBX7 as a project contributing to the co-equal goal of Delta ecosystem recovery. Its success will add to the abundance of Chinook salmon which is one important measures of ecosystem restoration.

(d) Promote statewide water conservation, water use efficiency, and sustainable water use.

Not applicable.

(e) Improve water quality to protect human health and the environment consistent with achieving water quality objectives of the Delta.

Not applicable.

(f) Improve the water conveyance system and expand statewide water storage.

Not applicable.

(g) Reduce risks to people, property, and state interests in the Delta by effective emergency preparedness, appropriate land uses, and investments in flood protection.

Not applicable.

(h) Establish a new governance structure with the authority, responsibility, accountability, scientific support, and adequate and secure funding to achieve these objectives.

Not applicable.

5. Assessment of Administration and Implementation Processes

Cost: No significant costs are anticipated over and above the normal operating cost of the U.S. Bureau of Reclamation which manages the operation of the Cross Channel gates.

Public agencies whose actions or decisions are essential for the proposed action to succeed.

California Department of Fish and Game (CDFG)
U.S. Fish and Wildlife Service (USFWS)
National Marine Fisheries Service (NMFS)
U.S. Bureau of Reclamation (USBOR)
East Bay Municipal Utilities District. (EBMUD)

Time line for the proposed project.

The project action is planned to occur each year when the maximum number of adult Mokelumne salmon are attempting to migrate to the Mokelumne main stem. For 2010, the project action will occur between October 4, 2010 and October 16, 2010. In future years these dates may change slightly depending on the biological forecast of the peak migration period. An advance request was provided to the USBOR in April, 2010 for the 2010 closure dates so that they could plan and complete the necessary operational changes necessary to implement the project.

How success or failure of the project will be determined.

The success of the project will be determined by a significant increase in escapement of adult fall run Chinook salmon to the Mokelumne River and a decrease in Mokelumne origin salmon straying to other Central Valley rivers. This determination will be made by the CDFG and the EBMUD.

Major benefits that can result from the proposed project.

1. The most important project benefit will be a significant increase in the number of fall run Chinook salmon that complete their life cycle from fresh water through the Delta to the ocean and back again. The fall run is in very serious trouble and has experienced a 95% decline in the Central Valley populations in the past seven years. Its crash triggered a complete closure of the salmon fishing seasons in 2008 and 2009 and only a token fishing season in 2010. In spite of these closures the runs have continued their serious decline. This flow alteration project can

potentially make a significant difference in salmon production from one of the many watersheds that must be addressed if the Delta ecosystem is to be restored and the salmon are to be recovered.

2. Another benefit will be a contribution to the recovery of the ESA listed Southern Resident Orca whales which rely on ocean populations of salmon as a food source. A lack of salmon populations in the ocean off of California has been determined to be a serious problem in the loss of the Southern Resident Orcas.

If the proposed project fails what is done.

If the project fails or does not produce enough adult salmon in the Mokelumne River to make a significant difference in the populations, the gate closures could be altered in an adaptive management action or terminated. Other gate changes or water operation changes would then need to be considered to solve the problem.

6. Science justification

It is the opinion of the state, federal and independent fishery scientists involved in the evaluations of the salmon production needs of the Mokelumne River and the Mokelumne salmon hatchery that this proposed action represents a “best science” step towards solving these production problems.

In 2009 over 50% of known Mokelumne origin salmon strayed to the American River. Using the constant fractional marking ratio (25% of production marked) results in an estimated 1,600 Mokelumne origin salmon returning to the American River instead of the Mokelumne. Not only does the straying affect the ability of the Mokelumne to sustain a viable Chinook salmon population, it also impacts the genetic integrity of the American River population. As it stands, Nimbus Hatchery spawns a significant number of Mokelumne origin salmon while leaving American origin salmon to spawn naturally. If straying is reduced through the DCC closure the proportion of American origin salmon spawned in the Nimbus Fish Hatchery would increase.

The attached letter from the Lower Mokelumne River Partnership (partnership) represents the culmination of multiple meetings of the Mokelumne River Technical Committee and the Partnership Steering Committee. Scientist from EBMUD, CDFG, USFWS, and NMFS have been discussing various adaptive management strategies that could be implemented within the lower Mokelumne River to improve returns to the river in the midst of the Central Valley salmon population collapse. Changes have been made to release locations and flow schedules to improve returns. The partnership committee has concluded that adding a DCC closure during the attraction pulse flow would likely increase the returns to the Mokelumne River and decrease straying to the American River. Closing the DCC gates represents the best available technology for solving this problem.

The following scientists are available for additional information.

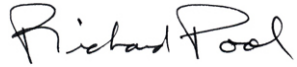
Jose Setka
Supervising Fishery Biologist
East Bay Municipal Utility District
(209) 365-1467
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Joe Johnson
Sr. Environmental Scientist
Calif. Dept. of Fish and Game
(916) 358-2943
jrjohnson@dfg.ca.gov

7. Application certifications and authorizations.

I certify that all the information submitted is complete and accurate to the best of my knowledge and that all attached exhibits are full, complete and correct. I certify that I understand that omitted or insufficient information can delay consideration of the application. I certify that this application is not complete until

accepted by the Council at a regularly scheduled meeting. I authorize the Council, its staff or other authorized personnel to share this information publically and authorize their collection of additional information relevant to this application.

A handwritten signature in black ink that reads "Richard Pool". The signature is written in a cursive style with a large, stylized "R" and "P".

Richard Pool

August 31, 2010

President

The Lower Mokelumne River Partnership

Partnership Steering
Committee:



**California Department of
Fish & Game**

Kent Smith
Acting Regional Manager
1701 Nimbus Rd., Suite A
Rancho Cordova, CA 95670



**East Bay Municipal
Utility District**

Alexander R. Coate
Director of Water & Natural
Resources
375 Eleventh St., M.S. 901
Oakland, CA 94607



**U.S. Fish & Wildlife
Service**

Kathy Wood
Asst. Field Supervisor
3310 El Camino Ave., Suite 130
Sacramento, CA 95821

**To Protect and
Enhance the Lower
Mokelumne River
Ecosystem**

April 20, 2010

Mr. Ronald Milligan
Operations Manager
Bureau of Reclamation
Central Valley Operations Office
3310 El Camino Avenue, Suite 300
Sacramento, CA 95281

Dear Mr. Milligan:

The California Department of Fish and Game (CDFG), the US Fish and Wildlife Service (USFWS) and East Bay Municipal Utility District (EBMUD) jointly oversee the management of the Mokelumne River fishery. With the concurrence of CDFG and USFWS, EBMUD is planning an adaptive management action to store water in Camanche Reservoir for an attraction flow in October 2010 to draw Chinook salmon into the Mokelumne River. The National Marine Fisheries Service also concurs with this adaptive management action. It is anticipated that the attraction flow would occur in the first half of October, contingent with Chinook salmon staging in the Bay and Delta. One independent, non-Mokelumne factor which is believed to increase straying is the operation of the Delta Cross Channel (DCC) during the up-migration season. When the DCC is open, the Mokelumne River becomes the conveyance corridor for Sacramento River water serving the export pumps in the south Delta.

To maximize the effectiveness of the Mokelumne River attraction flow, CDFG, USFWS and EBMUD jointly request that the DCC remain in the closed position during the timeframe of October 3-15. This action will help minimize straying of Mokelumne salmon to the American River and other river systems.

If you have any questions or concerns regarding this correspondence, please contact Robert Vincik of CDFG at rvicik@cdf.ca.gov, Donald Ratcliff of USFWS at donald_ratcliff@usfws.gov or Joe Miyamoto of EBMUD at jmiyamoto@ebmud.com.

Sincerely,


Kent Smith


Alexander R. Coate


Kathy Wood

RECEIVED

APR 22 2010

SACRAMENTO FISH
& WILDLIFE OFFICE

DEPT. OF FISH & GAME
APR 21 2010
REGION 2

Cross Channel Gates and Mokelumne River Map

